Overhead Beam And Floor Plate Style Lift

9,000 Pound Two Post

Models 9000AC & 9000FP

ASSEMBLY & OPERATION INSTRUCTION MANUAL

REV A-061813

9,000 lb.
Two Post Lifts

9,000 lb. capacity lifts. These lifts have the heavy-duty leaf chain, the steel pulleys, the high-strength cable equalization system and everything you'd expect from a quality lift.

PRO 9000AC

Asymmetric
Clear floor
model

PRO 9000FP

Floor plate
model

Features:

- 9,000 lb. lifting capacity
- Dual cylinders with low friction chain rollers
- Low profile automatic arm restraints
- 1 ½" and 5" stackable drop-in height adapters
- Electric override automatic safety shut-off (Clear floor model)
- Powder-coated paint finish
- Mounting hardware

Specifications:	9000AC	9000FP
Capacity	9,000 lbs.	9,000 lbs.
Lifting speed	50 sec.	50 sec.
Power pack	2 hp 220 vac	2 hp 220 vac
Amperage	20 amps	20 amps
Low pad height	4 ½"	4 ½"
Lifting height with adapters	75 ½"	75 ½"
Width overall	134"	134"
Height overall	142"	111 ½"
Shipping weight	1500 lbs.	1500 lbs.

Structural Warranty:

The following parts and structural components carry a five year warranty:

Columns	Top Rail Beam	Uprights	Arms Swivel Pins
Legs	Carriages	Tracks Overhead Beam	Cross Rails

Limited One-Year Warranty:

Tuxedo Distributors, LLC ("Tuxedo") offers a limited one-year warranty to the original purchaser of Tuxedo lifts and Wheel Service in the United States and Canada. Tuxedo will replace, without charge, any part found defective in materials or workmanship under normal use, for a period of one year after purchase. The purchaser is responsible for all shipping charges. This warranty does not apply to equipment that has been improperly installed or altered or that has not been operated or maintained according to specifications.

Other Limitations:

This warranty does not cover:

1. Parts needed for normal maintenance
2. Wear parts, including but not limited to cables, slider blocks, chains, rubber pads and pulleys
3. Replacement of lift and tire changer cylinders after the first 30 days. A seal kit and installation instructions will be sent for repairs thereafter.
4. On-site labor

Upon receipt, the customer must visually inspect the equipment for any potential freight damage before signing clear on the shipping receipt. Freight damage is not considered a warranty issue and therefore must be noted for any potential recovery with the shipping company.

The customer is required to notify Tuxedo of any missing parts within 72 hours. Timely notification must be received to be covered under warranty.

Tuxedo will replace any defective part under warranty at no charge as soon as such parts become available from the manufacturer. No guarantee is given as to the immediate availability of replacement parts.

Tuxedo reserves the right to make improvements and/or design changes to its lifts without any obligation to previously sold, assembled or fabricated equipment.

There is no other express warranty on the Tuxedo lifts and this warranty is exclusive of and in lieu of all other warranties, expressed or implied, including all warranties of merchantability and fitness for a particular purpose.

To the fullest extent allowed by law, Tuxedo shall not be liable for loss of use, cost of cover, lost profits, inconvenience, lost time, commercial loss or other incidental or consequential damages.

This Limited Warranty is granted to the original purchaser only and is not transferable or assignable.

Some states do not allow exclusion or limitation of consequential damages or how long an implied warranty lasts, so the above limitations and exclusions may not apply. This warranty gives you specific legal rights and you may have other rights, which may vary from state to state.

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IMPORTANT NOTES

- Do not install this lift on an asphalt surface.
- Do not install this lift on any surface other than concrete confirming to minimum specifications.
- Do not install this lift over expansion joints or cracks. Check with an engineer.
- Do not install this lift on a second floor with a basement beneath without written authorization from an engineer.
- This lift is only as good as the floor you put it on. A good level floor is recommended for proper lift installation and operation. Concrete should be a minimum of 4” thick and 3,000psi tensile strength with steal or fiber mesh reinforcement.
- The lift is intended to raise the entire body of the vehicle. Do not attempt to lift only part of the vehicle. Improper use of this equipment could result in damage to the lift, yourself or other property.
- The lift is intended to lift vehicles only. It is not designed to lift any person or equipment containing people.
- Users of this equipment should be qualified, responsible and should follow the operation and safety guidelines set forth in this manual.

- Improper installation can cause damage or injury. Manufacturer will not assume liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product. Read the installation and operation manual in its entirety before attempting to install the lift.

DEFINITION

This lift is a 9000 lb. capacity, 2-Post Lift with a latch system. The safety latch is in contact with the latch rack as the lift ascends and drops into place. The safety latch engages in rack at 3” increments beginning about 16”from the ground. The latch must be manually disengaged for the lift to descend. The latch is released by raising the latch up off the latch rack and pulling the release cable. Once the raise button is pressed, the latch will automatically re-engage after approximately 3” of travel. Heavy bearings and heavy-duty leaf chains are used throughout the lift. The work is done with the heavy-duty chain connected to a 2 1/2” cylinder, driven by a hydraulic pump capable of providing 3,000psi.

Please read the Safety Procedures and Operation Instructions in this manual before operating and installing the lift. Proper installation is very important. To minimize the chance of making an error in installation, please read this manual through carefully before beginning installation. Check with building owner and/or an engineer when applicable. The lift should be located on a relatively level floor 4” thick and 3,000psi concrete sufficiently cured.

This is a vehicle lift installation/operation manual and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment.

Proper application of the equipment described herein is limited to the parameters detailed in the specifications and the uses set forth in the descriptive passages.

PREPARATION

The installation of this lift is relatively simple and can be accomplished by 2 people in a few hours. The following tools and equipment are needed:

- 12 quarts of Non-Detergent Hydraulic Oil SAE-10 AW 32 or other good grade
- Chalk line and 12' Tape measure
- Rotary Hammer Drill with 3/4" Drill Bit. Core Drill ReBar Cutter recommended
- 4' Level
- Metric sockets and open wrench set, 13-24 mm
- Vise Grips

GENERAL INFORMATION

1. Identify the components and check for shortages. If shortages are discovered, contact us immediately. Save the shipping bolts for use in the installation.

2. Lift location-check with building owner and /or an engineer when applicable. The lift should be located on a relatively level floor 4" thick and 3,000psi concrete sufficiently cured with no cracks within 38" and no seams with in 6" of the base plate. Remember any structure is only as strong as its foundation.

Check for ceiling clearance- lifting height plus vehicle height if installing the Floor Plate Style Lift. Check for clearance in the front and rear of vehicle when on lift.

Basic Specification

Description	Capacity	Lifting Time	Overall Height	Overall Width	Between Posts
Floor Plate Style/ Asymmetric	9000lbs	50 Sec	111"	134.63"	110"
Overhead Beam Style/ Asymmetric	9000lbs	50 Sec	142"	134.63"	110"

Please also read the general information about this lift shown of Figure 1 for Floor Plate Style, Figure 2 for Overhead Beam Style and Figure 3 for Asymmetric type.

IMPORTANT CONCRETE AND ANCHORING INFORMATION

1. Concrete shall have compression strength of at least 3,000psi and a minimum thickness of 4” in order to achieve a minimum anchor depth of 3 1/2”. If the top of the anchor exceeds 2” above the floor grade, you **DO NOT** have enough depth.

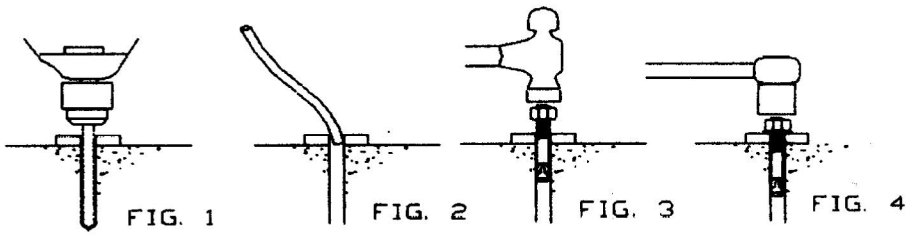
2. Use holes in column base plate as a guide before drilling the 3/4”diameter holes in the concrete floor. Make sure the hole distance from the edge is not less than 6”. Hole depth should be a minimum of 4”, it is recommended to drive through the 4” concrete, unless you have a high water table.

3. **CAUTION: DO NOT** install on asphalt or other similar unstable surface. Columns are supported only by anchoring into the floor.

4. Shim each column base until each column is plumb. If one column has to be elevated to match the plane of the other column, then full-size base shim plates should be used (Reference Shim Kit) torque anchors to 130 ft-lbs. Shim thickness **MUST NOT** exceed 3/8” when using the 5 1/2” long anchor provided with the lift. Adjust the column extensions plumb.

5. If anchors do not tighten to 130 ft-lbs installation torque, then replace concrete under each column base with a 4’X4’X6” thick 3,000psi minimum concrete pad keyed under and flush with the top of existing floor. Let concrete cure before installing lifts and anchors.

ANCHORING TIP SHEET



Anchors must be at least 6"from the edge of the slab or any seam.

1. Use a concrete hammer and a drill, a solid drill bit with a carbide tip, the same diameter as the anchor, 3/4". Do not use excessively worn bits or bits that have been incorrectly sharpened.

2. Keep the drill perpendicular.

3. Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue and reduce binding.

4. Drill hole to depth of 2" deeper than length of anchor or all the way through the concrete.

5. For better holding power, blow dust from the hole.

6. Place a flat washer and hex nut over threaded end of anchor, leaving the nut flush with the top of the bolt. Carefully tap anchor into hole. Do not damage threads. Tap anchor into the concrete until nut and flat washer are against base plate. Do not use an impact wrench to tighten. Tighten the nut with two or three turns on average after the concrete has cured (28-day cure). If the concrete is very hard, only one or two turns may be required.

INSTALLATION INSTRUCTION FOR FLOOR PLATE STYLE AND OVERHEAD BEAM STYLE 2-COLUMN HYDRAULIC LIFTS

PLEASE READ THIS INSTRUCTION BEFORE STARTING TO INSTALL THE LIFT

STEP 1:
After unloading the lift, place it near the installation location.

STEP 2:
Remove the shipping bands and packing materials from the unit.

STEP 3:
Remove the packing brackets and bolts holding the two columns together. **Do not discard bolts, they are used in the assembly of the lift**.

STEP 4:
Once the power unit column location is decided, insure that the proper lift placement is observed from walls and obstacles. Also, check the ceiling height for clearance in this location. Note the power unit column can be located on either side. It is helpful to try to locate it on the lift to save steps during operation.

STEP 5: **Figure 5 Page 19**
Assemble the uprights to the columns on model Overhead Beam Style Lift (the Floor Plate Style Lift does not have uprights.). Raise the columns to a vertical position.

STEP 6:
Position the columns facing each other 134" outside base plates.

STEP 7: **Figure 4 Page 18**
Using a 3/4" concrete drill, drill the anchor holes in the main side column, installing anchors as you go. Use a block of wood or rubber mallet to drive anchor bolts in. Drilling through concrete (recommended) will allow the anchor to be driven thru the bottom if the threads are damaged.

STEP 8:
Check to make sure side-to-side and front-to-back are level. Use 3/4 washers or shim stock, placing shims as close as possible to the hole locations. This will prevent bending the column bottom plates. Tighten the 3/4" anchor bolts to 130 ft-lbs. of torque.

STEP 9: **Figure 5 Page 19**
Using a tape measure, measure from back corner of the base on main side column to the opposites back corner of the offside column to insure legs are square. ***Using the***

dimensions, install overhead beam to top of columns BEFORE drilling anchors for offside column to ensure that the column can be properly leveled.

STEP 10:
After overhead beam is assembled drill and anchor offside column as described in steps 7 and 8.

STEP 11: **Figure 6 Page 20**
Install the equalizing cables: Refer to figure for general cable arrangement for both Floor Plate Style and Overhead Beam Style Lifts. Set carriages on the first safety latch engagement. Be sure each carriage is at the same height by measuring from the top of the base to the bottom of the carriage. Double check the latches before working under the carriages. This dimension should be with in 1/4" Run first cable as in Figure 6. Tighten nut on one cable stud so that the end of stud passes the nylon on the nut. Pull the other end of cable and run nut on it; tighten both nuts. Repeat above for second cable.

STEP 12: Figure 8-9 Pages 22-23
Connecting the hydraulic hoses: as shown on Figure 8 for Floor Plate Style Lift and Figure 9 for Overhead Beam Style Lift.

STEP 13: Figure 9 Page 23
Mount the power unit on lift as Figure 9.

STEP 14:
Installing cut off cable: Take the 2- eye bolts included in the parts box and install them in the holes located in the front of each upright about 6" from the top. Install a nut, and lock washer on either side, to make them secure.
Starting on the left side (offside), attach the 1/16" cable to the eye bolt located near the top of the left side upright using the small aluminum ferrules. Loop the cable through the ferrule, then through the eye of the bolt and back through the ferrule. Crimp the ferrule to hold the cable. Pass the cable through the eye bolt on the right side (main side) and down to the power unit. Loop the cable through the eye on the cutoff switch post, located on top of the upswitch junction box, secure with ferrule. Make it as tight as you can without tripping the cutoff switch.

STEP 15: **Figure 4** **Page 18**

For Floor Plate Style Lift, mount the floor plate as Figure 4.

STEP 16:

Install the swing arms on the carriages using the included 1 1/2" diameter pins. Check to make sure the rack on the lock should fully engage with the gear on the arm.

STEP 17:

Adjust the carriage cables tension: adjust each cable to approximately 1/2" side-to side play. Check the latch releases to insure the carriage is still sitting on the appropriate latch.

STEP 18:

Remove the vent plug from the power unit and fill the reservoir. Use an anti-wear 32 or 46 non-foaming, non-detergent hydraulic fluid. The unit holds approximately twelve quarts.

STEP 19:

Make the Electrical hookup to the 220V Single Phase Power Unit. It is recommended that a 220 Volt, 20amp twist lock plug be installed in the power line just ahead of the power unit's size wire for a 20amp circuit.

Warning-the wiring must comply with local code. Have a certified electrician make the electrical hook-up to the power unit. Protect each circuit with time delay fuse or circuit breaker 208V-230V single Phrase 60Hz 30amp. Motor cannot run on 50Hz without a physical change to motor.

ATTENTION: IF 380V POWER UNIT APPLIES, PLEASE ADJUST AND USE RELATIVE TWIST LOCK AND TIME DELAY FUSE OR CIRCUIT BREAKER ACCORDINGLY!

STEP 20:

Do not place any vehicle on the lift at this time. Cycle the lift up and down several times to insure latches click together and all air is removed from the system. To lower the lift, both latch releases must be manually released. Latches will automatically reset once the lift ascends approximately 17" from base. If latches click out of sync, tighten the cable on the one that clicks first.

RAISE THE LIFT

Press button on power unit. The latch mechanism will 'trip over' when the lift raises and drops into each latch stop. But, to lock the lift you must press the Lower level to relieve the hydraulic pressure and let the latch set tight in a lock position.

Always lock the lift before going under the vehicle. Never allow anyone to go under the lift when raising or lowering. Read the safety procedures in the manual.

Note: It is normal for an empty lift to lower slowly-it may be necessary to add weight.

LOWER THE LIFT

1. Raise the lift until the latch clears.
2. Pull both latch releases.
WARNING ALWAYS RELEASE BOTH SIDES
3. Press the lever at the power unit to lower the lift.

SAFETY PROCEDURES

- Never allow an unauthorized person to operate lift. Thoroughly train new employees in the use and care of the lift.
- Caution-the power unit operates at high pressure.
- Remove passengers before raising vehicle.
- Prohibit unauthorized people from being in shop area while lift is in use.
- Total lift capacity is 9000lbs with 2500lbs per arm pad.
- Prior to lifting vehicle, walk around the lift and check for any objects that might interfere with the operation of: lift, safety latches, tools, air hoses or shop equipment.
- When approaching the lift with a vehicle, center the vehicle between the columns so that the tires will clear the swing arms easily. Slowly drive the vehicle up between the posts. Have someone outside the vehicle guide the driver.
- Always lift vehicle using all four arms.
- Never use lift to raise one end or one side of vehicle.
- Raise vehicles about 3' and check stability by rocking.
- Prior to lowering vehicle, walk around the lift and check for any objects that might interfere with the operation of lift, safety latches, tools, air hoses or shop equipment. Swing the arms out of the path and slowly drive the vehicle out. Have someone outside the vehicle guide the driver.

ALWAYS LOCK THE LIFT BEFORE GOING UNDER THE VEHICLE.
NEVER ALLOW ANYONE TO GO UNDER THE LIFT WHEN RAISING OR LOWERING.

MAINTENANCE SCHEDULE

The following periodic maintenance is the suggested minimum requirements and minimum intervals of accumulated hours or monthly period, which ever comes sooner. If you hear a noise or see any indication of impending failure – **then cease operation immediately** – and inspect, correct and/or replace parts as required.

IT IS IMPORTANT TO INSPECT LIFTING EQUIPMENT AT THE START OF EVERY SHIFT. THESE AND OTHER PERIODIC INSPECTIONS ARE THE RESPONSIBILITY OF THE USER.

DAILY PRE-OPERATION CHECK (8 HOURS)

The user should perform daily check. **ATTENTION!** Daily check of safety latch system is very important and the discovery of device failure before needed could save you from expensive property damage, lost production time, serious personal injury or even death.

- Check safety lock audibly and visually while in operation.
- Check safety latches for free movement and *full engagement with rack.*
- Check hydraulic connections and hoses for leakage.
- Check chain connections for bends, cracks and looseness.
- Check cables connections for bends, cracks and looseness.
- Check for frayed cables in both raised and lowered position.
- Check snap rings at each roller and sheave.
- Check bolts, nut and screws. Tighten if needed.
- Check wiring and switches for damage.
- Keep base plate free of dirt, grease or any other corrosive substances.
- Check floor for stress cracks near anchor bolts.
- Check swing arm restraints.

WEEKLY MAINTENANCE (40 HOURS)

- Check anchor bolts torque to 130 ft-lbs for the 3/4 anchor bolts. *Do not use impact wrench.*
- Check floor for stress cracks near anchor bolts.
- Check hydraulic oil level.
- Check and tighten bolts, nuts and screws.
- Check cylinder pulley assembly for free movement or excessive wear on cylinder yoke or pulley pin.
- Check cable pulley for free movement and excessive wear.

YEARLY MAINTENANCE

- Lubricate chain.
- Grease rub blocks and column surface contacting rub blocks.

environment shorter interval may be required.

The following items should only be performed by a trained maintenance expert.

- Replace hydraulic hoses.
- Replace chains and rollers.
- Replace cables and sheaves.
- Replace or rebuild air and hydraulic cylinders as required.
- Replace or rebuild pumps/motors as required.
- Check hydraulic and air cylinder rod and rod end (threads) for deformation or damage.
- Check cylinder mount for looseness and damage.

Relocating or changing components may cause problems. Each component in the system must be compatible; an undersized or restricted line will cause a drop in pressure. All valve, pump and hose connections should be sealed and/or capped until just prior to use. Air hoses can be used to clean fittings and other components. However, the air supply must be filtered and dry to prevent contamination. **NOTE:** Contamination is the most frequent cause of malfunction or hydraulic equipment.

TROUBLE SHOOTING

1. Motor dose not run:
   A. Breaker or fuse is blown.
   B. Motor thermal overload tripped. Wait for overload to cool.
   C. Faulty wiring connections. Call electrician.
   D. Defective up button. Call electrician for checking.

2. Motor runs but will not raise:
   A. A piece of trash is under check valve. Push the handle down and the up button at the same time. Hold for 10-15 seconds. This should flush the system.
   B. Check the clearance between the plunger valve of the lowering handle. There should be 1/16 clearance.
   C. Remove the check valve cover and clean ball and seat.
   D. Oil level should be just under the vent cap port when the lift is down.

3. Oil blows out breather of power unit:
   A. Oil reservoir overfilled.
   B. Lift lowered too quickly while under a heavy load.
   C. Return tube is loose or disconnected.

4. Motor hums and will not run:
    A. Impeller fan cover is dented. Take off and straighten.
    B. Faulty wiring. Call electrician
    C. Bad capacitor. Call electrician
    D. Low voltage. Call electrician
    E. Lift overloaded. Reduce load.

5. Lift jerks going up and down: air in hydraulic system. Raise lift all the way to the top and return to floor. Repeat 4-6 times. Do not let this overheat power unit.

6. Oil leaks:
    A. *Power unit:* If the power unit leaks hydraulic oil around the tank mounting flange then check the oil level in the tank. The level should be two inches below the flange of the tank. Check with a screwdriver.
    B. *Rod end of cylinder:* If the rod seal of the cylinder is leaking, then rebuild or replace the cylinder.
    C. *Breather end of the cylinder:* If the piston seal of the cylinder is leaking, then rebuild or replace the cylinder.

7. Lift makes excessive noise:
    A. Leg of the lift is dry and requires grease.
    B. Cylinder pulley assembly or cable pulley assembly is not moving freely.
    C. Pins or cylinder yoke may have excessive wear.

OWNER / EMPLOYER RESPONSIBILITIES

The Owner/Employer:

- Shall establish procedures to periodically maintain, inspect and care for the lift in accordance with the manufactures recommended procedures to ensure continued safe operations.

- Shall provide necessary lockout / tagouts of energy sources per ANSIZ244.1 –1982 before beginning any lift repairs.

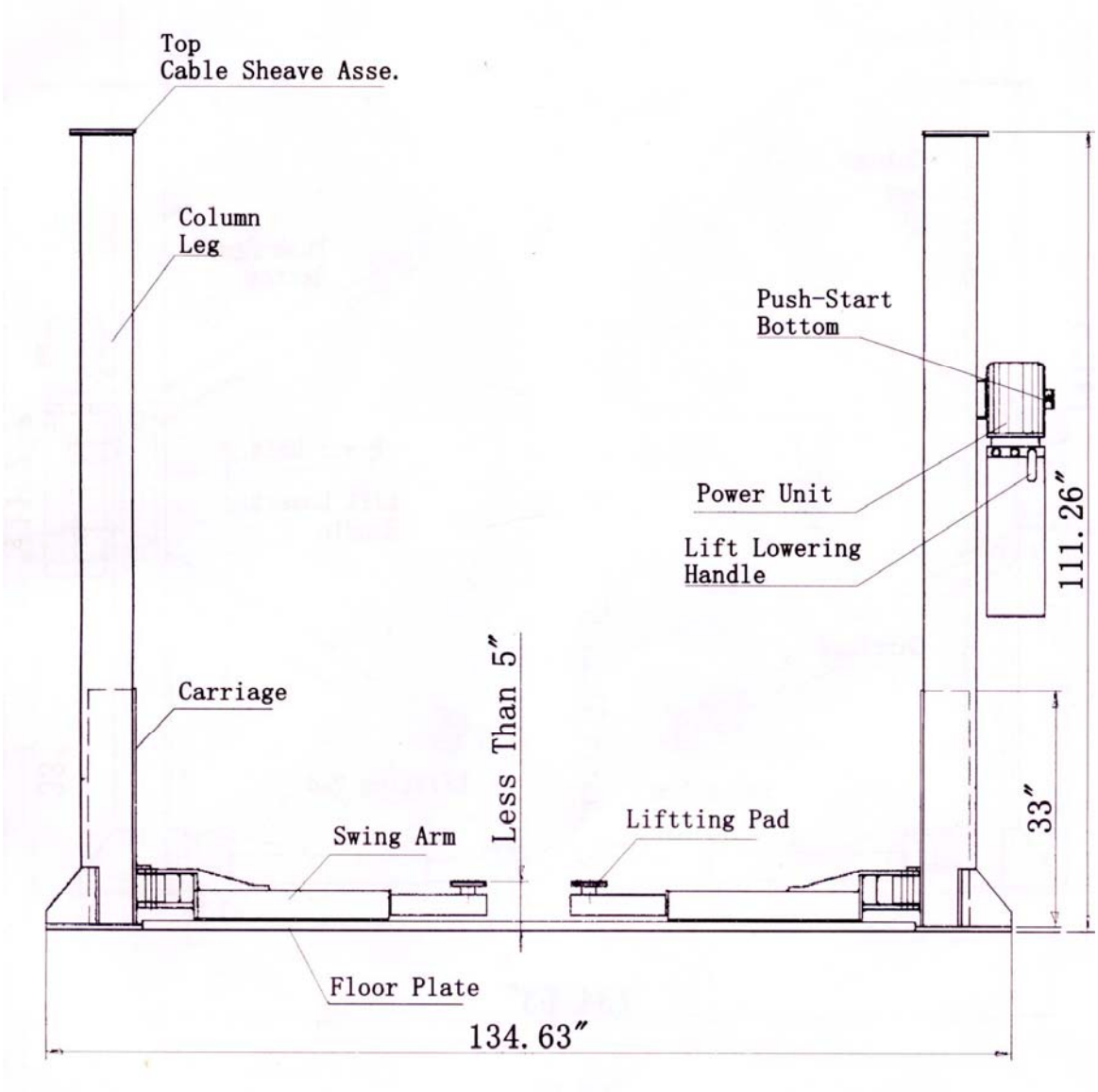
- Shall not modify the lift in any manner without prior written consent of the manufacturer.

- Shall display the operating instructions supplied with the lift in a conspicuous location in the lift area convenient to the operator.

- Shall ensure that lift operators are instructed in the proper and safe use and operation of the lift using the manufacturer’s instructions supplied with the lift.

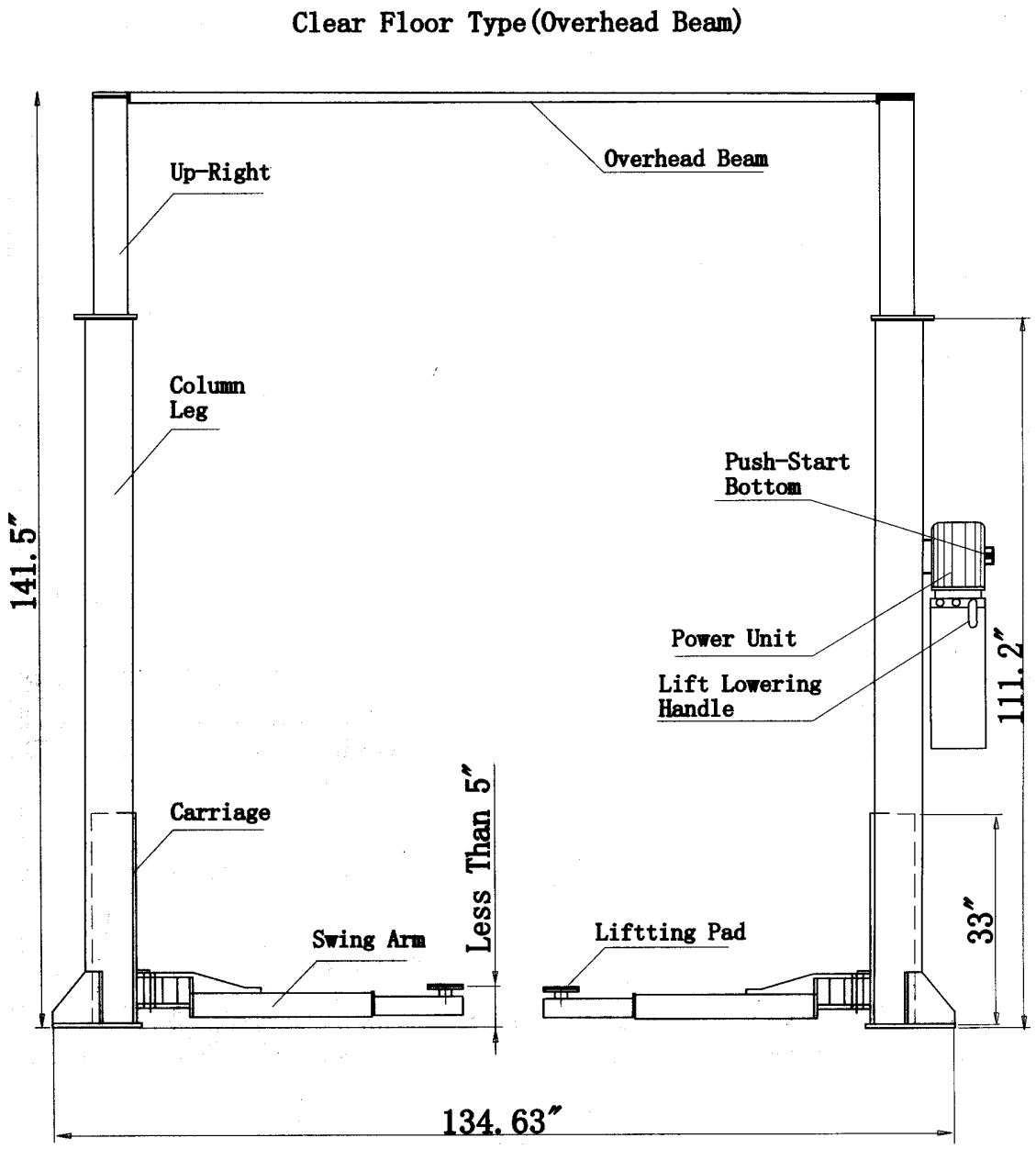
INSTALLATION INSTRUCTION Fig 1

For Floor Plate Lift



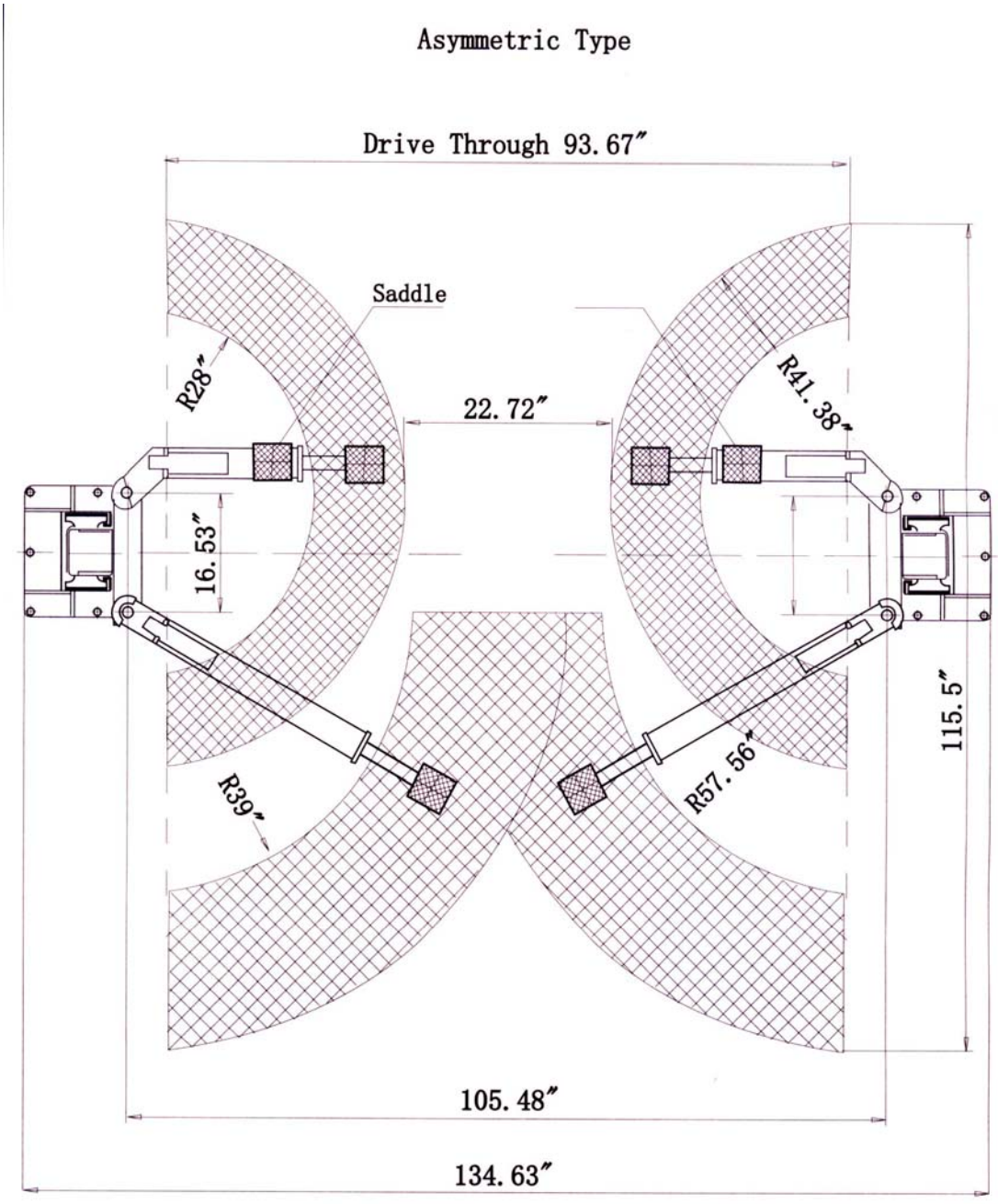
INSTALLATION INSTRUCTION Fig 2

For Overhead Lift



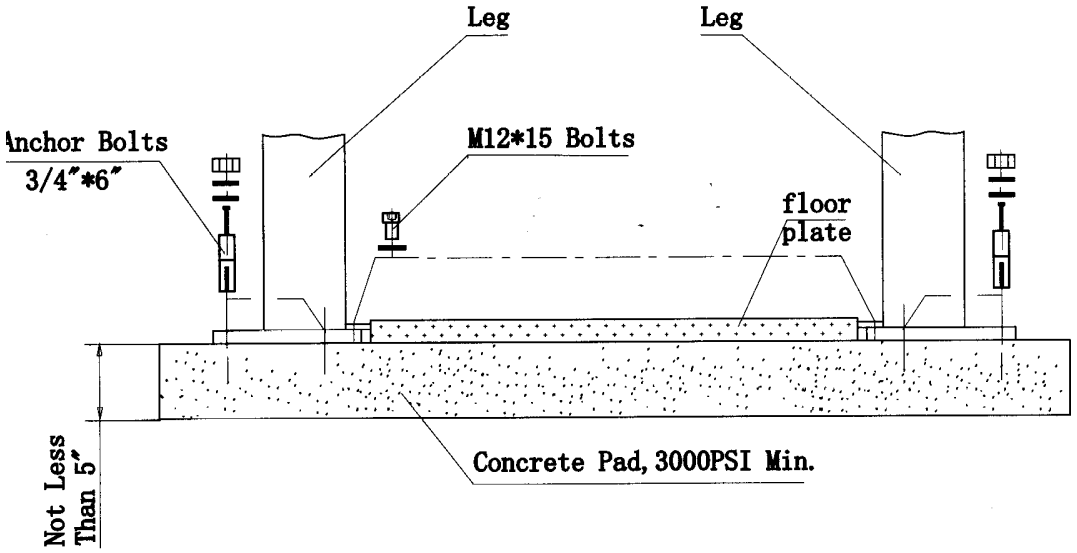
INSTALLATION INSTRUCTION Fig 3

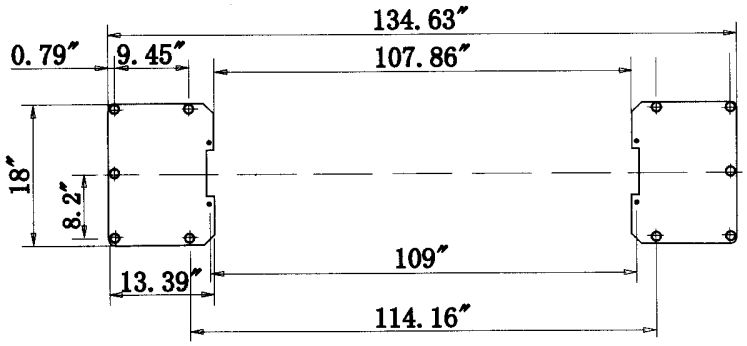
Asymmetric Type

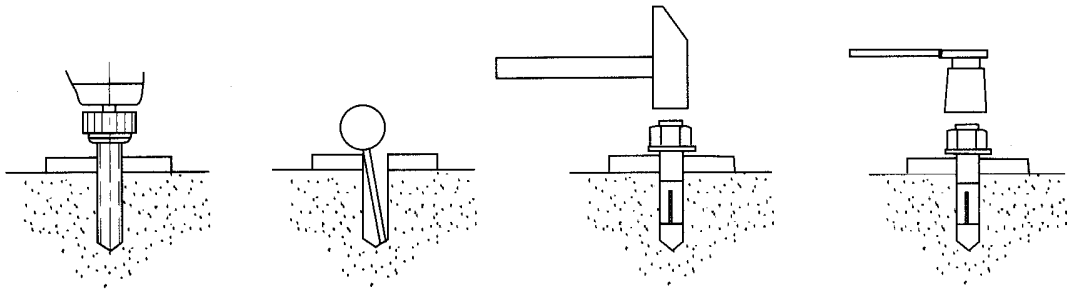


INSTALLATION INSTRUCTION Fig 4

Prepare Concrete

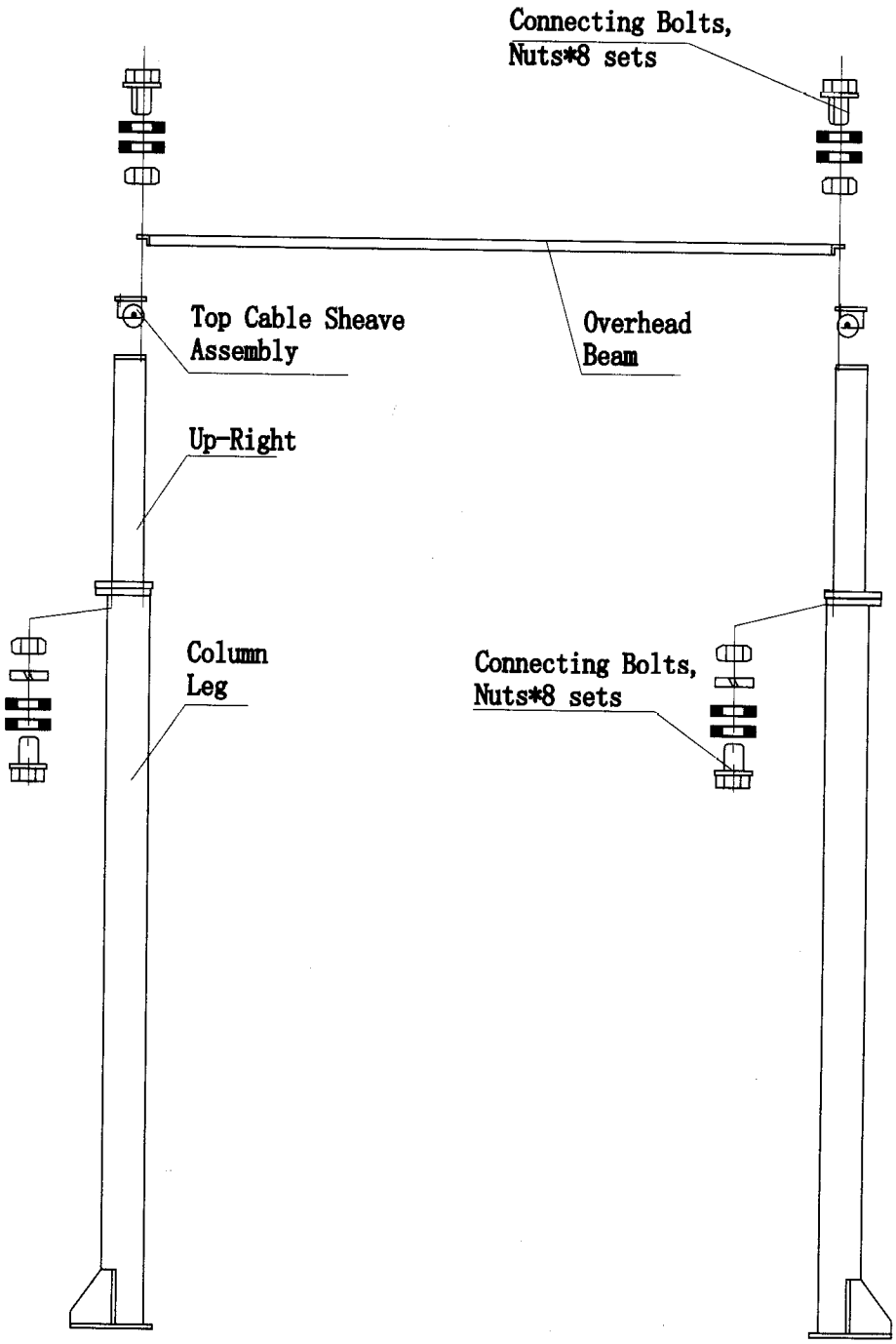






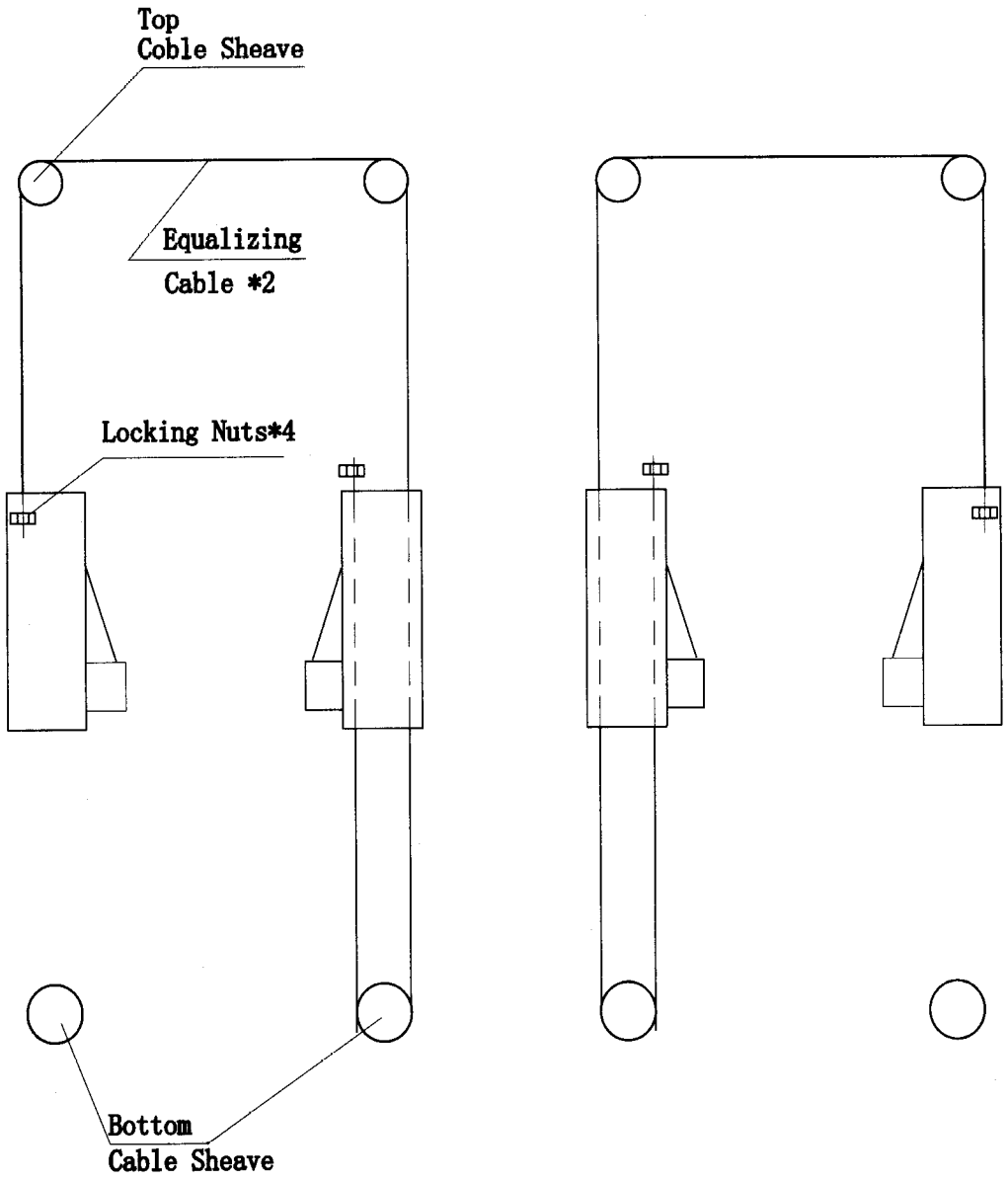
INSTALLATION INSTRUCTION Fig 5

Upright, Overhead Beam Assembly



INSTALLATION INSTRUCTION Fig 6

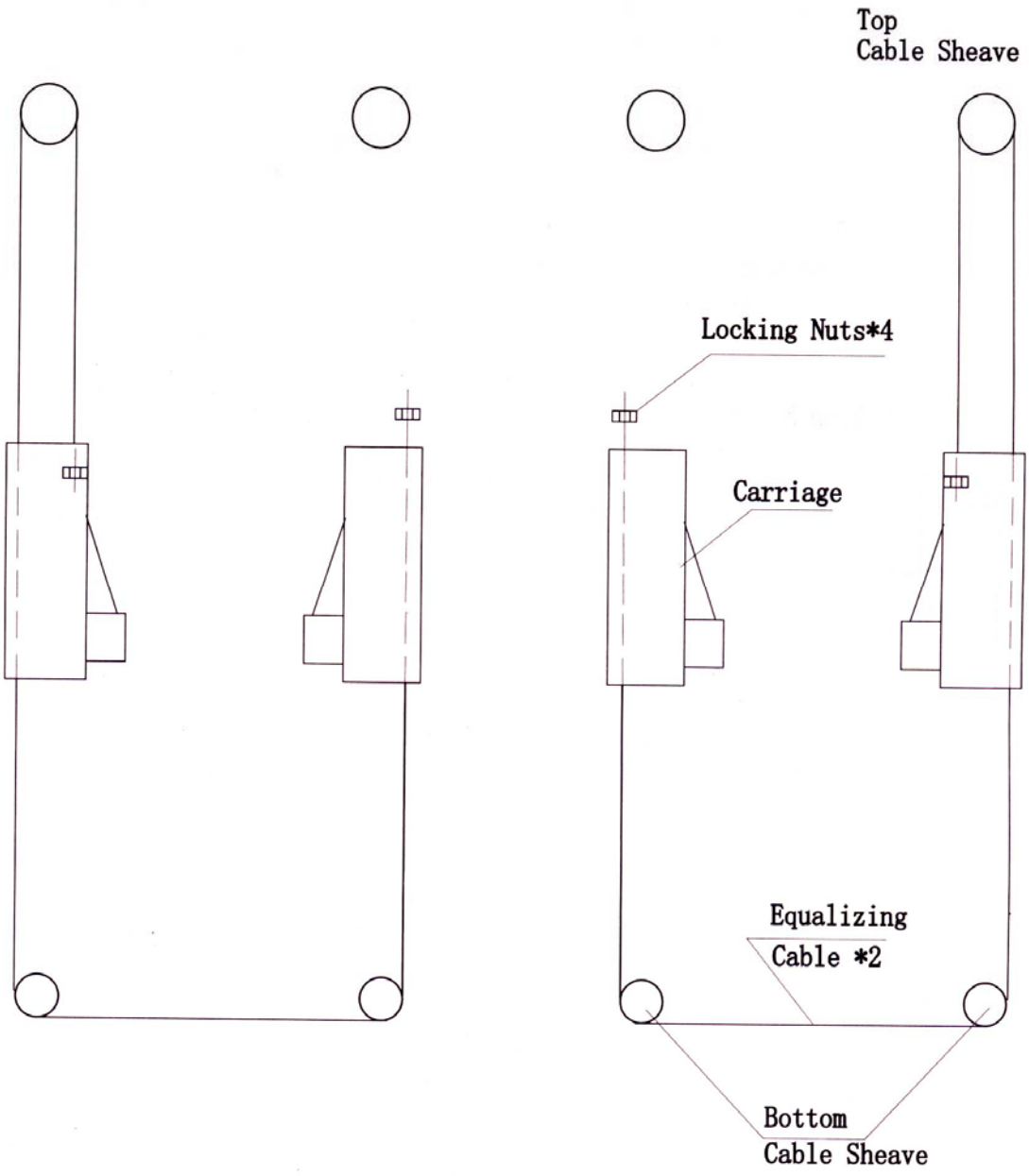
Equalizing Cable Installation – Overhead Beam Type



Note: Always try to keep two cables in same tension

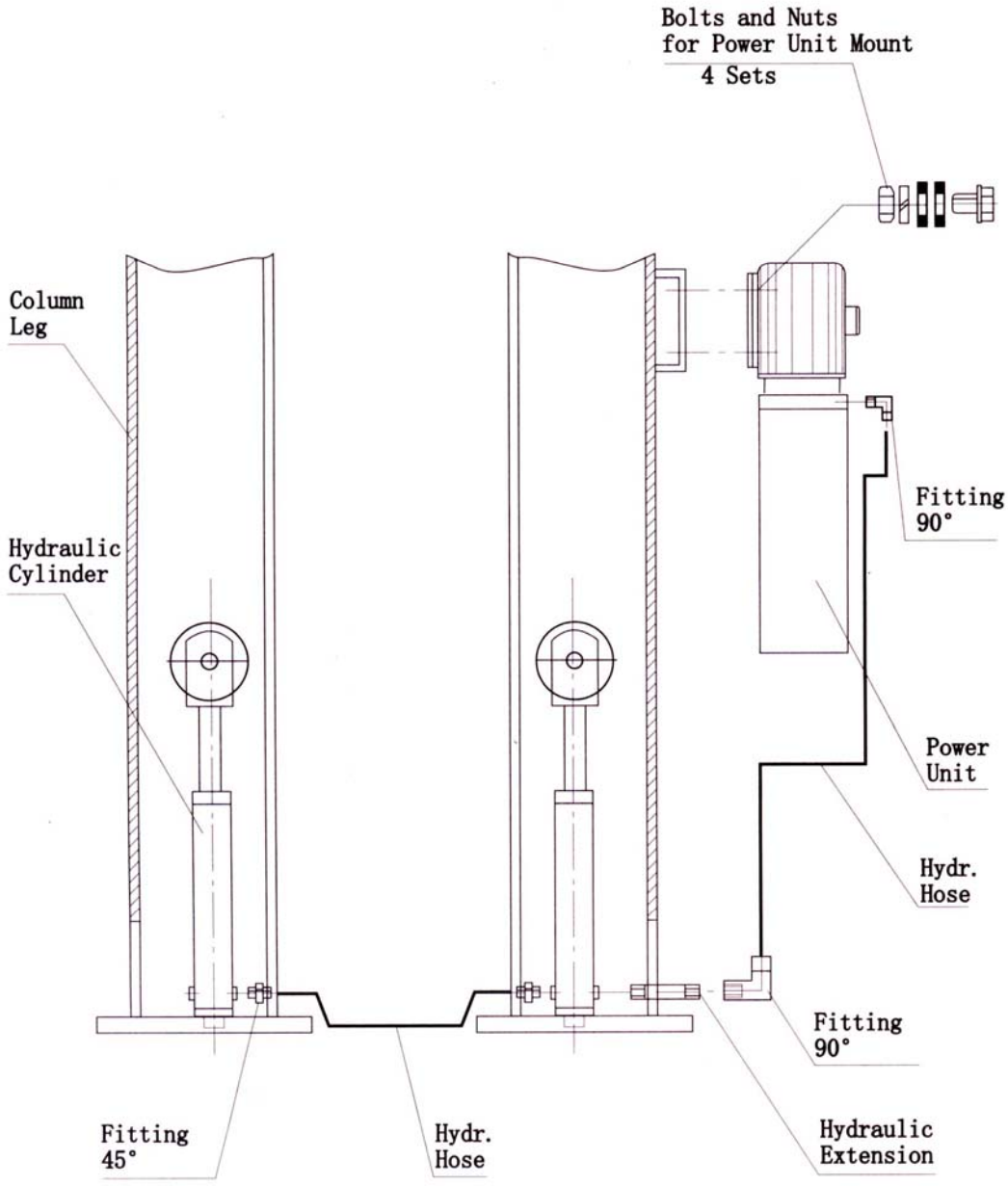
INSTALLATION INSTRUCTION Fig 7

Equalizing Cable Installation – Floor Plate Type



INSTALLATION INSTRUCTION Fig 8

Hydraulic System Assembly – Floor Plate Type



INSTALLATION INSTRUCTION Fig 9

Hydraulic System Assembly – Overhead Beam Type

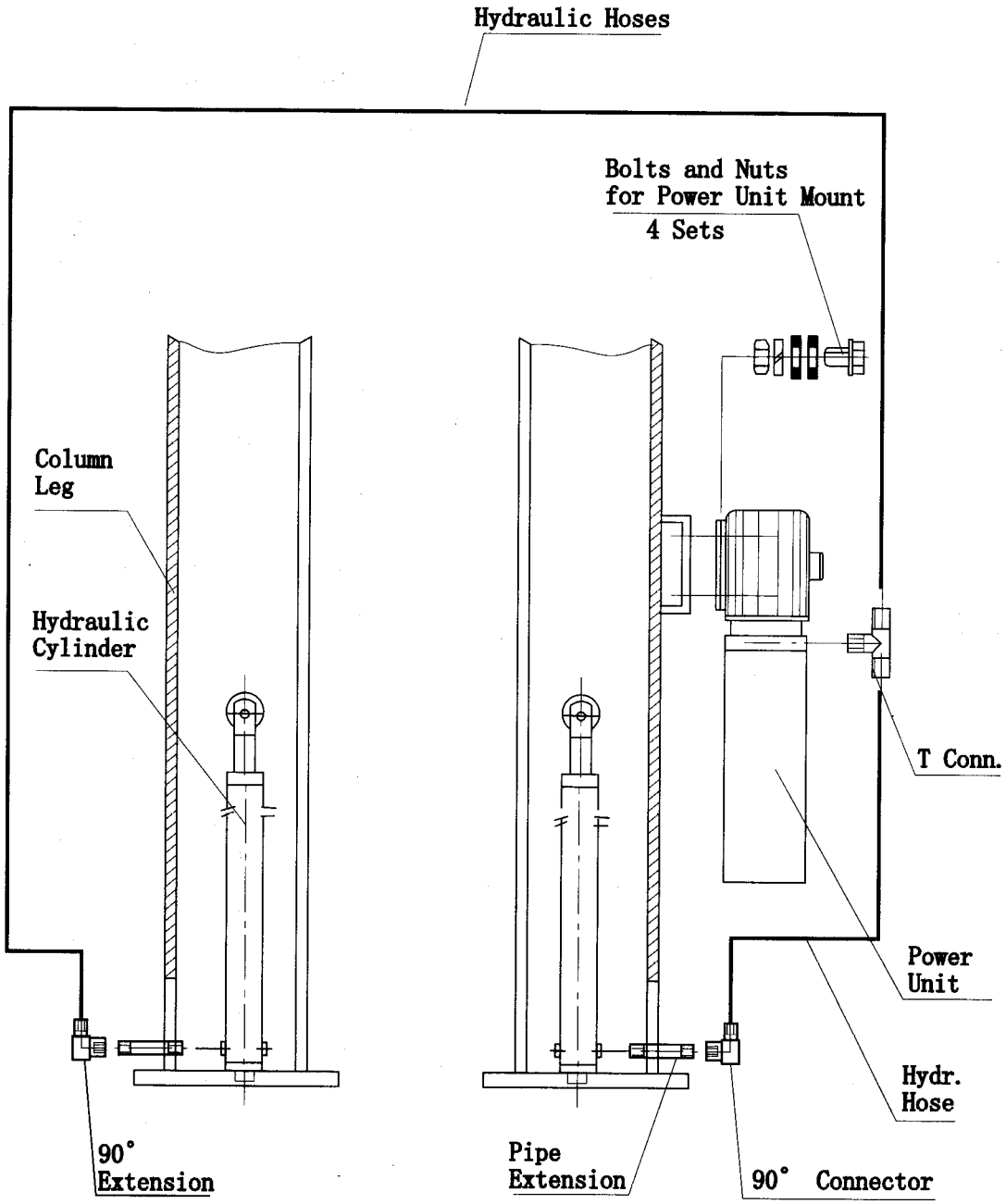


Fig. 11

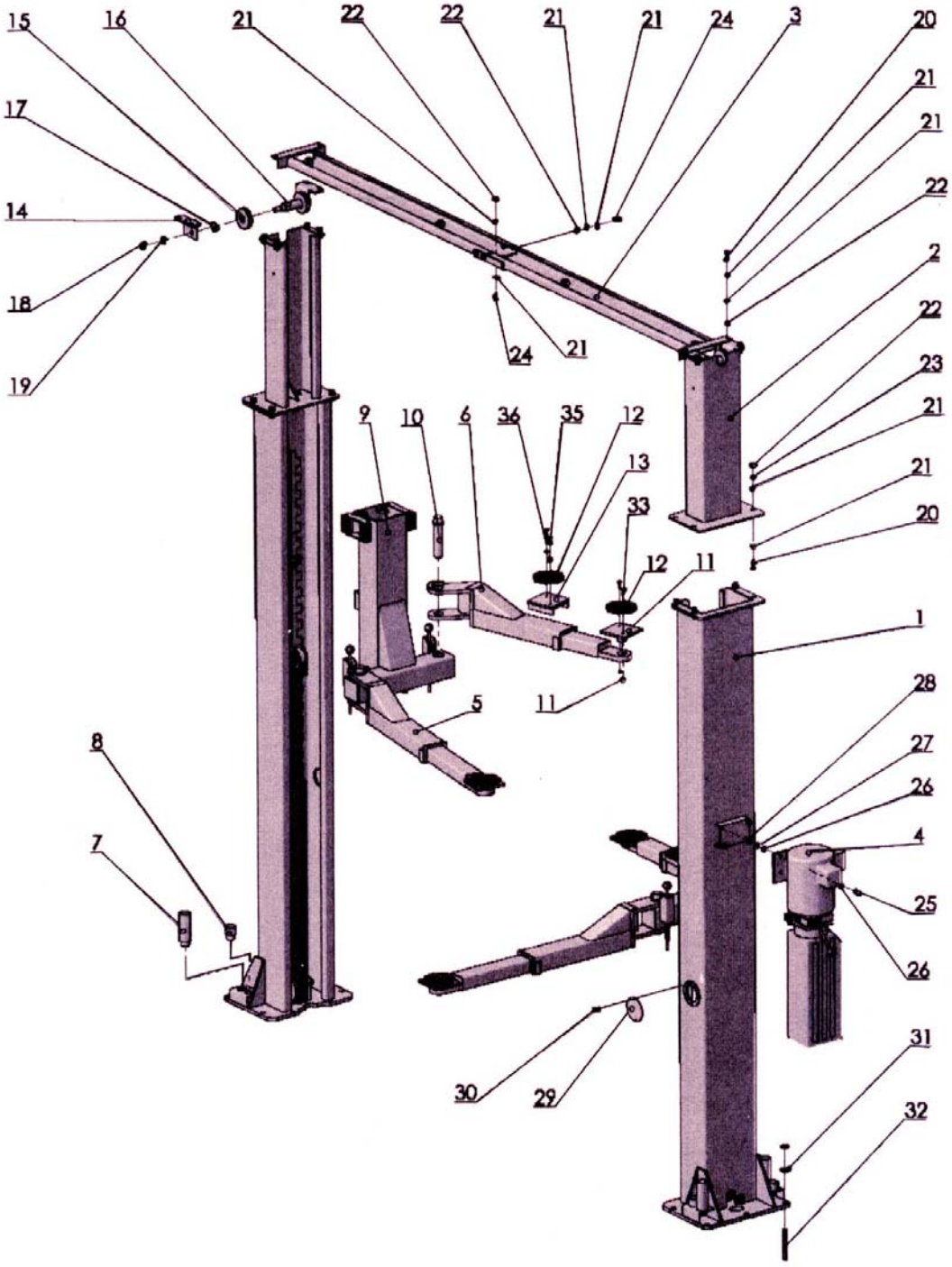

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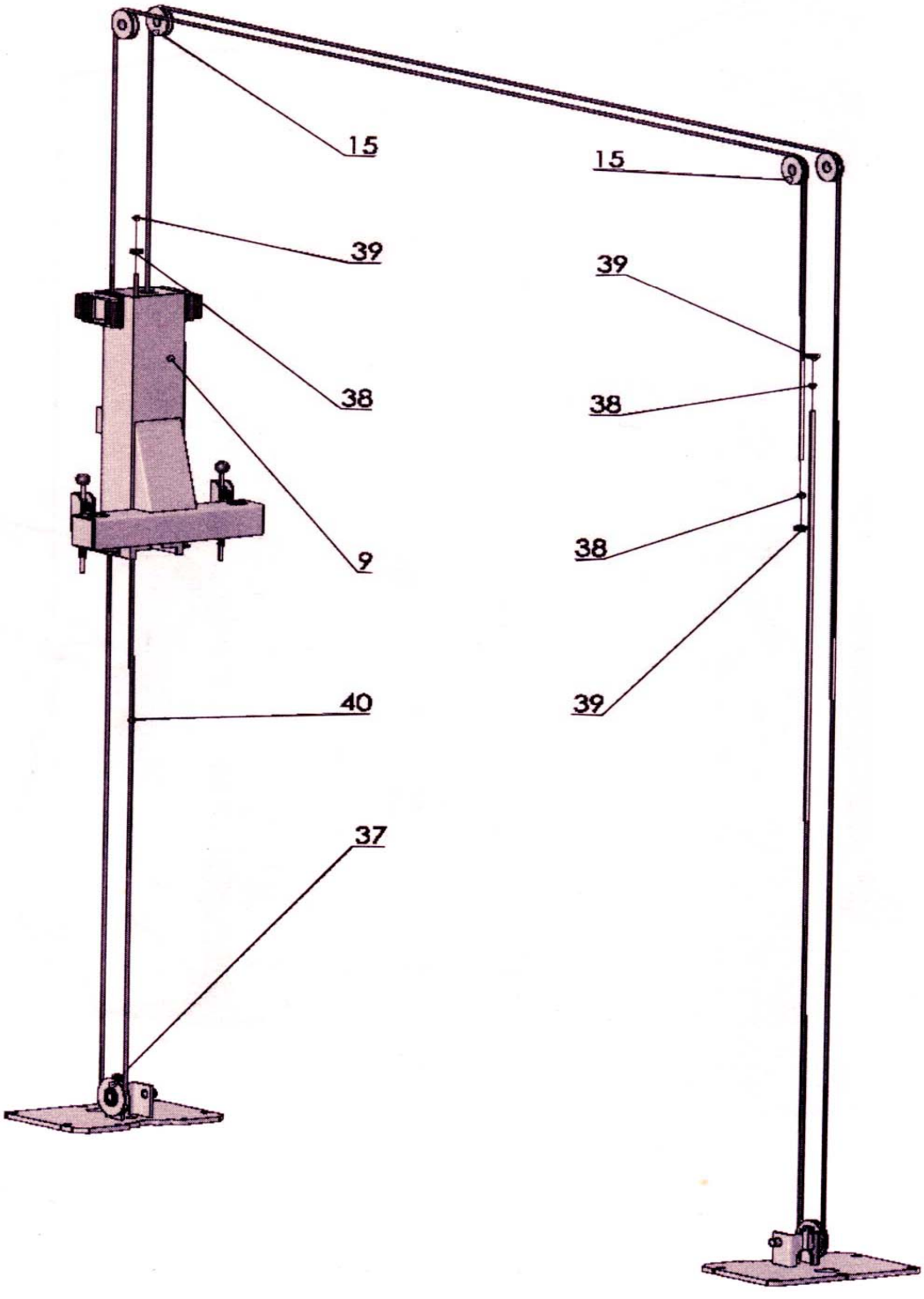
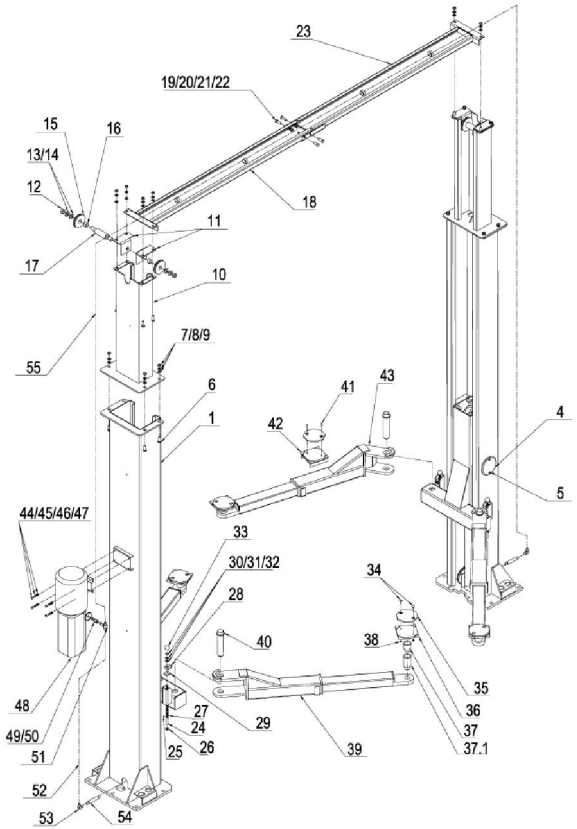
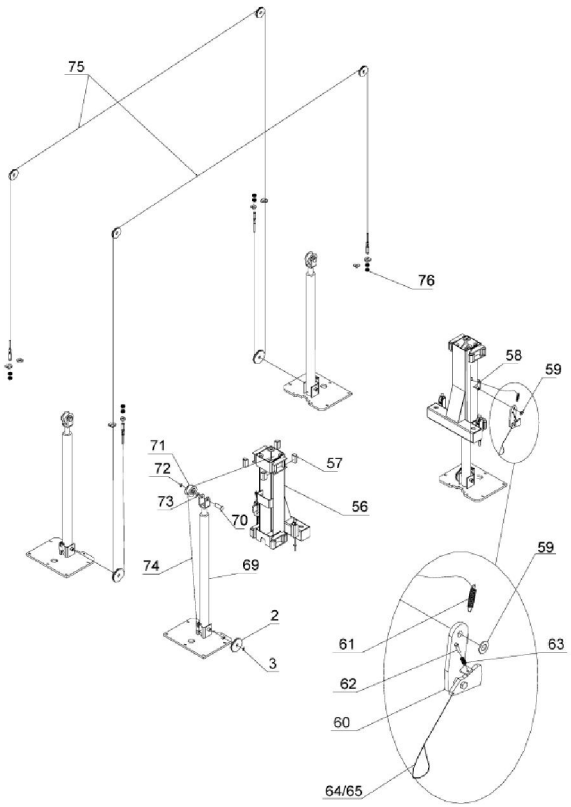
Fig. 12 105928



9000AC Parts List





Item	Description	QTY
1	Column jointings	2
2	Pulley	2
3	Spindle spring washer	2
4	Cover	2
5	Cross bolt	4
6	Hexangular bolt C	16
7	Nut	16
8	Flat washer	16
9	Spring washer	16
10	Up-rights	2
11	Top bracket(left, right)	2 each
12	Nut	4
13	Spring washer	4

ITEM	DESCRIPTION	QTY
14	Spring washer A	4
15	Pulley	4
16	Sheath	6
17	Spindle	2
18	Top beam(left)	1
19	Bolt	4
20	Nut	4
21	Spring washer	4
22	Flat washer	4
23	Top beam(Iright)	1
24	Rack spindle	4
25	Shaft sheath	4
26	Flat washer A	4

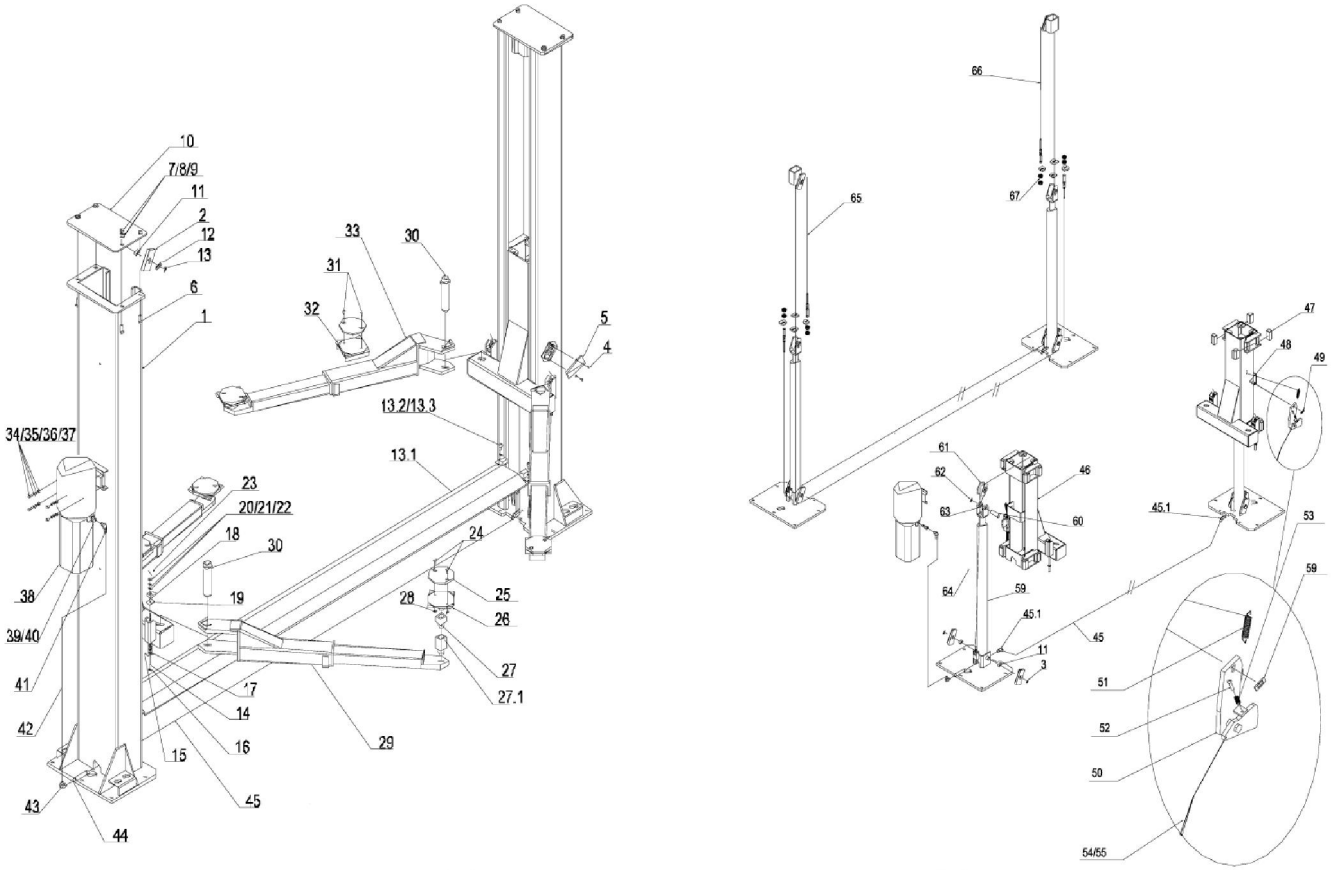
ITEM	DESCRIPTION	QTY
27	Spring	4
28	Rack board	4
29	Ramp board	4
30	Nut	4
31	Flat washer	4
32	Spring washer	4
33	Ball handle	4
34	Bolt	8
35	Rubber washer	4
36	Salver jointing	4
37	Low adapter	4
37.1	High adapter	4
38	Nut	8

Spare Parts List

ITEM	DESCRIPTION	QTY
39	Swing arms	2
40	Pin	4
41	Cross bolt	4
42	Salver jointing	2
43	Swing arms(L,R)	1 each
44	Hexangular bolt C	4
45	Nut	4
46	Flat washer	4
47	Spring washer	4
48	Hydraulic cylinder	1
49	Washer	1
50	Hydraulic connection	1
51	T-fitting	1
52	Hydraulic pose	1
53	Elbow fitting	2
54	Direct outside fitting	2
55	Hydraulic pump	1
56	Carriage	2
57	Nylon block	16
58	Cotter pin	2
59	Flat washer	2
60	Retroback jointing	2
61	Pull spring	2
62	Inner haxangular screw	2
63	Spring	2
64	Pull rope	2
65	Sheath pose	4
69	Hydraulic cylinder	2
70	Spindle	2
71	Idler wheel	2
72	Spindle spring washer	2
73	Spindle	4
74	Chain	2
75	Steel cable	2
76	Nut	8

*** Easily Worn Parts**

9000FP Parts List



ITEM	DESCRIPTION	QTY
1	Column jointings(L,R)	2
2	Pulley	6
3	Spindle spring washer	6
4	Cover	2
5	Cross bolt	4
6	Hexangular bolt C	8
7	Nut	8
8	Flat washer	8
9	Spring washer	8
10	Up board	2
11	Bush	6

ITEM	DESCRIPTION	QTY
12	Flat washer C	2
13	A spindle spring washer	2
13.1	Protective board	1
13.2	Inner haxangular bolt	4
13.3	Flat washer	4
14	Rack spindle	4
15	Shaft sheath	4
16	Flat washer A	4
17	Spring	4
18	Rack board	4
19	Ramp board	4

ITEM	DESCRIPTION	QTY
20	Nut	4
21	Flat washer	4
22	Spring washer	4
23	Ball handle	4
24	Bolt	8
25	Rubber washer	4
26	Salver jointing	4
27	Low adapter	4
27.1	High adapter	4
28	Nut	8
29	Swing arms	2

Spare Parts List

ITEM	DESCRIPTION	QTY
30	Pin jointing	4
31	Cross bolt	4
32	Salver jointing	2
33	Swing arms (L,R)	1 each
34	Hexangular bolt C	4
35	Nut	4
36	Flat washer	4
37	Spring washer	4
38	Pump	1
39	Washer	1
40	Hydraulic connection	1
41	Elbow fitting	1
42	Pose	1
43	Elbow fitting	1
44	Direct outside fitting	1
45	Pose	1
45.1	Direct outside fitting	2
46	Carriage jointing	2
47	Nylon block	16
48	Shaft sheath	2
49	Flat washer	2
50	Retropack jointing	2
51	Pull spring	2
52	Inner hexangular bolt	2
53	Spring	2
54	Pull rope	2
55	Sheath pose	4
59	Hydraulic cylinder	2
60	Spindle	2
61	Idler wheel	2
62	Spingle spring washer	2
63	Spindle	4
64	Chain	2
65	Steel cable	1
66	Steel cable	1
67	Nut	8

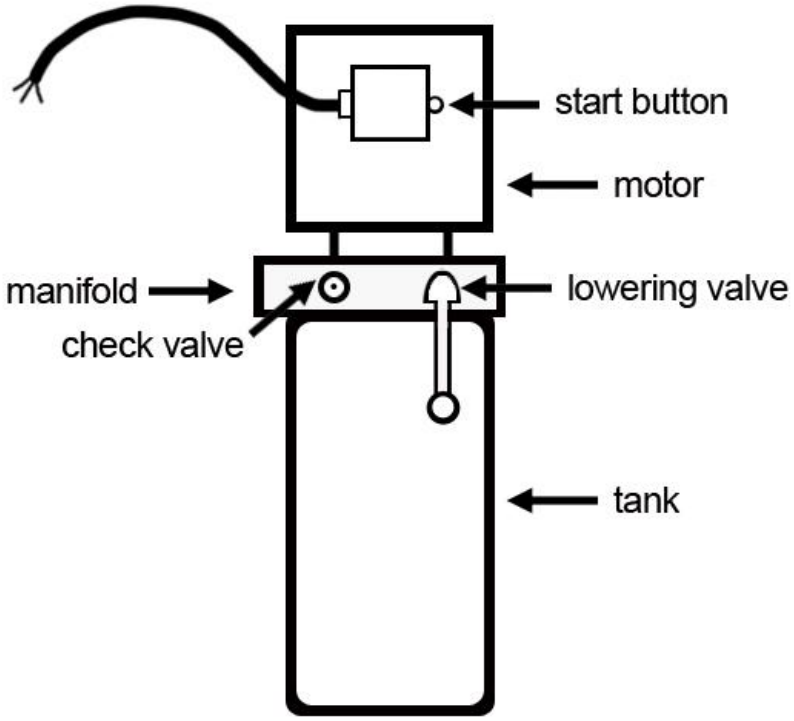
*** Easily Worn Parts**

IMPORTANT

POWER UNIT PRIMING PROCEDURE

THE PROBLEM: Power unit runs fine but will not pump any fluid.

Step 1 – Locate the check valve, the flush plug to the left of the lowering valve. (See drawing below.)



Step 2 – Using an Allen wrench and shop towel – with shop towel in place to catch fluid – loosen the check valve plug 2 ½ turns to allow it to leak.

Step 3 – Push the START button for one second, then release for three seconds. Repeat these steps until unit starts pumping fluid.

Step 4 – Tighten the check valve plug.

YOUR POWER UNIT SHOULD BE PRIMED